

COPY FOR CONTINUING  
APPLICATIONPlease type a plus sign (+) inside this box → ☐

PTO/SB/01 (12-97)

Approved for use through 9/30/00. OMB 0651-0032

Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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<b>DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)</b>	<b>Attorney Docket Number</b>	MIT7203/7465 CIP	
	<b>First Named Inventor</b>	Edwards, David A.	
	<b>COMPLETE IF KNOWN</b>		
	<b>Application Number</b>	09 / 194,068	
	<b>Filing Date</b>		
	<b>Group Art Unit</b>		
<input type="checkbox"/> Declaration Submitted with Initial Filing	<b>OR</b>	<input checked="" type="checkbox"/> Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)	
		<b>Examiner Name</b>	

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Aerodynamically Light Particles for Pulmonary Drug Delivery

the specification of which

(Title of the invention)

☐ Is attached hereto  
OR☒ was filed on (MM/DD/YYYY) 05/23/1997 as United States Application Number or PCT International

Application Number PCT/US97/08895 and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT International application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
PCT/US97/08895	PCT	05/23/1997	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	<input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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**DECLARATION — Utility or Design Patent Application**

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT International application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)
08/655,570 08/739,308	05/24/1996 10/29/1996	

☐ Additional U.S. or PCT International application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

☐ Customer Number 

OR

☐ Registered practitioner(s) name/registration number listed belowPlace Customer  
Number Bar Code  
Label here

Name	Registration Number	Name	Registration Number
Patrea L. Pabst	31,284	Kevin W. King	42,737
Collen A. Beard	38,824		
Robert A. Hodges	41,074		

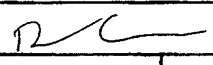
☐ Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.Direct all correspondence to: ☐ Customer Number  OR ☒ Correspondence address below

Name	Patrea L. Pabst				
Address	Arnall Golden & Gregory 2800 One Atlantic Center				
Address	1201 West Peachtree Street				
City	Atlanta	State	GA	ZIP	30309-3450
Country	United States	Telephone	(404) 873-8794	Fax	(404) 873-8795

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle (if any))	Family Name or Surname
David A.	Edwards

Inventor's Signature					Date	3/1/99	
Residence: City	Boston	State	MA	Country	US	Citizenship	US
Post Office Address	452 Beacon Street, Unit 6						
Post Office Address							
City	Boston	State	MA	ZIP	02115	Country	US

☒ Additional inventors are being named on the 2 supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto

Please type a plus sign (+) inside this box → ☐

PTO/SB/02A (3-97)

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## DECLARATION

ADDITIONAL INVENTOR(S)  
Supplemental Sheet  
Page 1 of 2

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor					
Given Name (first and middle (if any))		Family Name or Surname					
Giovannia		Caponetti					
Inventor's Signature	<i>Giovanna Caponetti</i>					Date	3/9/99
Residence: City	Piacenza	State		Country	IT	Citizenship	IT
Post Office Address	Via Genova 33						
Post Office Address							
City	Piacenza	State		ZIP	29100	Country	IT
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor					
Given Name (first and middle (if any))		Family Name or Surname					
Jeffrey S.		Hrkach					
Inventor's Signature	<i>Jeffrey S. Hrkach</i>					Date	2/26/99
Residence: City	Somerville	State	MA	Country	US	Citizenship	US
Post Office Address	65 Willow Avenue, Apartment 1						
Post Office Address							
City	Somerville	State	MA	ZIP	02144	Country	US
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor					
Given Name (first and middle (if any))		Family Name or Surname					
Noah		Lotan					
Inventor's Signature	<i>Noah Lotan</i>					Date	2/4/99
Residence: City	Haifa	State		Country	IL	Citizenship	IL
Post Office Address	27 Shimkin Street						
Post Office Address							
City	Haifa	State		ZIP	34750	Country	IL

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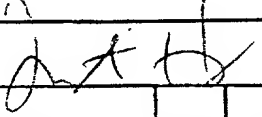
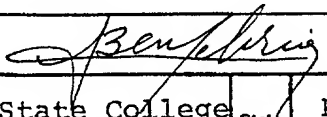
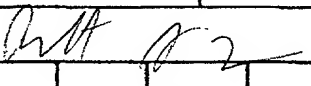
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## DECLARATION

ADDITIONAL INVENTOR(S)  
Supplemental Sheet  
Page 2 of 2

Name of Additional Joint Inventor, if any:				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any])				Family Name or Surname			
Justin				Hanes			
Inventor's Signature				Date		1/20/99	
Residence: City		Baltimore		State		MD	
				Country		US	
Post Office Address		223 Brandon Road					
Post Office Address							
City		Baltimore		State		MD	
				ZIP		21212	
				Country		US	
Name of Additional Joint Inventor, if any:				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any])				Family Name or Surname			
Abdell Aziz				Ben-Jebria			
Inventor's Signature				Date		1/28/99	
Residence: City		State College		State		PA	
				Country		US	
Post Office Address		804 Stratford Drive					
Post Office Address							
City		State College		State		PA	
				ZIP		16801	
				Country		US	
Name of Additional Joint Inventor, if any:				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any])				Family Name or Surname			
Robert S.				Langer			
Inventor's Signature				Date		2/4/99	
Residence: City		Newton		State		MA	
				Country		US	
Post Office Address		77 Lombard Street					
Post Office Address							
City		Newton		State		MA	
				ZIP		02158	
				Country		US	

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: David A. Edwards, Giovanni Caponetti, Jeffrey S. Hrkach, Noah Lotan, Justin Hanes, Abdell Aziz Ben-Jebria and Robert S. Langer

Serial No.: 09/194,068

Group Art Unit: 1614

Filed: April 8, 1999

**COPY FOR CONTINUING  
APPLICATION**

Title: AERODYNAMICALLY LIGHT PARTICLES FOR PULMONARY DRUG  
DELIVERY

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231	
on 4-20-00	<i>Jean A. White</i>
Date	Signature
Jean A. White	
Typed or printed name of person signing certificate	

REVOCATION OF POWERS OF ATTORNEY  
AND APPOINTMENT OF NEW ATTORNEYS AND/OR AGENTS

Box M Fee  
Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The Penn State Research Foundation, a Corporation duly organized under the laws of the Commonwealth of Pennsylvania, is an assignee together with Massachusetts Institute of Technology, of the entire right, title and interest in the above-identified application. The Penn State Research Foundation hereby appoints the attorneys and/or agents associated with:

Hamilton, Brook, Smith & Reynolds, P.C.  
2 Militia Drive  
Lexington, Massachusetts 02421-4799  
Customer No. 21005

also Anabela C. Taylor, Registration No. 38,999 of Hamilton, Brook, Smith & Reynolds, P.C., to prosecute the above-identified application and any divisions or continuations thereof and to conduct all business in the United States Patent and Trademark Office. All previously granted Powers of Attorney are hereby revoked.

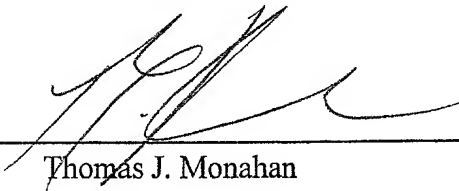
Certification under 37 C.F.R. §3.73(b) is submitted herewith.

All correspondence should be sent to Carolyn S. Elmore, Hamilton, Brook, Smith & Reynolds, P.C., Two Militia Drive, Lexington, Massachusetts 02421-4799. Please direct all telephone calls to Carolyn S. Elmore at (781) 861-6240, and all facsimile communications to (781) 861-9540.

Respectfully submitted,

The Penn State Research Foundation

By

  
Thomas J. Monahan

Title Director, Intellectual Property Office

Date 01/04/00

CERTIFICATE UNDER 37 C.F.R. § 3.73(b)

Applicants: David A. Edwards, Giovanni Caponetti, Jeffrey S. Hrkach, Noah Lotan, Justin Hanes, Abdell Aziz Ben-Jebria  
and Robert S. Langer

Application No.: 09/194,068 Filed: April 8, 1999

For: AERODYNAMICALLY LIGHT PARTICLES FOR PULMONARY DRUG DELIVERY

The Penn State Research Foundation  
 (Name of Assignee)

a Corporation  
 (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

certifies that it is

- A. ☐ the assignee of the entire right, title and interest in the patent application identified above.
- B. ☒ an assignee together with Massachusetts Institute of Technology of the entire right, title and interest in the patent application identified above. A separate Certificate under 37 CFR § 3.73(b) is attached.

The right, title and interest of the above-named assignee in the patent application identified above is established by virtue of:

- A. ☒ An assignment from inventors David Edwards and Abdell Aziz Ben-Jebria, of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel 9925, Frame 0098 - 0102, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s) of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
 The document was recorded in the Patent and Trademark Office at  
 Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
 The document was recorded in the Patent and Trademark Office at  
 Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
 The document was recorded in the Patent and Trademark Office at  
 Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are attached.

☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 01/04/00

Name: Thomas J. Monahan

Title: Director, Intellectual Property Office

Signature: 01/04/00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: David A. Edwards, Giovanni Caponetti, Jeffrey S. Hrkach, Noah Lotan, Justin Hanes, Abdellaziz Ben-Jebria and Robert S. Langer

Continuation Application of

Application No.: 09/194,068

Filed: 371(c) date of April 8, 1999

For: AERODYNAMICALLY LIGHT PARTICLES FOR PULMONARY  
DRUG DELIVERY

Date: <u>3/1/02</u>
EXPRESS MAIL LABEL NO. <u>EV 044391075 US</u>

REMARKS/CHANGE OF CORRESPONDENCE ADDRESS

Box PATENT APPLICATION

Assistant Commissioner for Patents

P.O. Box 2327

Arlington, VA 22202

Sir:

This application is a continuation of Application No. 09/194,068, which is the U.S. National stage of International Application No. PCT/US97/08895, filed on May 23, 1997, with the completion of the §371(c) requirements on April 8, 1999, published in English, which claims priority to U.S. Application No. 08/655,570, filed May 24, 1996, now abandoned, and U.S. Application No. 08/739,308, filed October 29, 1996, now U.S. Patent No. 5,874,064.

A updated related applications paragraph has been added as the first paragraph in the specification.

The specification has been revised to incorporate amendments entered in the parent application. No new matter has been added.

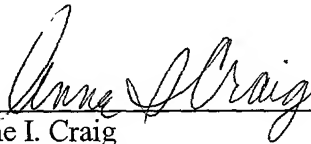


Pursuant to 37 C.F.R. 1.63(d)(4), please note that a new Power of Attorney (a copy is attached hereto) was submitted on April 20, 2000 in parent Application No. 09/194,068.

Please send all correspondence in the above-identified continuation application to:  
Customer No. 021005; Hamilton, Brook, Smith & Reynolds, P.C., 530 Virginia Road, P.O. Box 9133, Concord, Massachusetts 01742-9133. In addition, please direct all telephone calls to Anne I. Craig at (978) 341-0036, and all facsimile communications to (978) 341-0136.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By   
Anne I. Craig  
Registration No. 32,976  
Telephone: (978) 341-0036  
Facsimile: (978) 341-0136

Concord, MA 01742-9133

Dated: 3/1/02